June 22, 2005

Page 1 of 1



PLOUG'N.

Please Direct All Correspondence to Customer Number 20995

TRANSMITTAL LETTER INFORMATION DISCLOSURE STATEMENT

pplicant

Docket No.:

Christofferson et al.

App. No

10/518,808

Filed

November 29, 2004

For

USE OF BISPHOSPHONIC ACID

DERIVATIVES FOR THE TREATMENT OF CALCIUM PYROPHOSPHATE DEPOSITION DISEASE AND DENTAL

TREATMENT

Examiner

Unknown

Art Unit

1614

CERTIFICATE OF MAILING

I hereby certify that this correspondence and all marked attachments are being deposited with the United States Postal Service as first-class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on

June 22, 2005

(Date)

nan, Ph.D., Reg. No. 45,664

Mail Stop Amendment

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Enclosed for filing in the above-identified application are:

- An Information Disclosure Statement and PTO/SB/08 equivalent listing references for **(X)** consideration:
 - (X) Listing 25 references.
 - (X) Enclosing 12 references.
- The Commissioner is hereby authorized to charge any additional fees which may be required, or (X) credit any overpayment, to Account No. 11-1410.
- (X) Return prepaid postcard.

Eric S. Furman, Ph.D. Registration No. 45,664 Attorney of Record Customer No. 20,995 (619) 235-8550

1773552_1\062205



INFORMATION DISCLOSURE STATEMENT

plicant

Christoffersen et. al.

App. No

10/518,808

Filed

November 29, 2004

For

USE OF BISPHOSPHONIC ACID

DERIVATIVES FOR THE TREATMENT OF CALCIUM PYROPHOSPHATE DEPOSITION

DISEASE AND DENTAL

TREATMENT

Examiner

Unknown

Art.Unit

1614

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Enclosed for filing in the above-identified application is a PTO/SB/08 Equivalent listing 25 references to be considered by the Examiner. Also enclosed are 12 foreign patent references and/or non-patent literature as listed on the Information Disclosure Statement. The 13 U.S. patent references listed on the Information Disclosure Statement are not enclosed.

This Information Disclosure Statement is being filed before the receipt of a first Office Action on the merits, and presumably no fee is required. If a first Office Action on the merits was mailed before the mailing date of this Statement, the Commissioner is authorized to charge the fee set forth in 37 C.F.R. § 1.17(p) to Deposit Account No. 11-1410.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

By:

Eric S. Furman, Ph.D. Registration No. 45,664 Attorney of Record

Customer No. 20,995

(619) 235-8550

1773184\061605

OLP INFORMATION E	DISCLOSURE
OTP INFORMATION DE STATEMENT BY	'APPLICANT

Application No. 10/518,808

Filing Date November 29, 2004

First Named Inventor Jorg Christoffersen

Art Unit 1614

Examiner Unknown

Attorney Docket No. PLOUG1.001APC

SHEET 1 OF 2

U.S. PATENT DOCUMENTS					
Examiner Initials	Cite No.	Document Number Number - Kind Code (if known) Example: 1,234,567 B1	Publication Date MM-DD-YYYY	Name of Patentee or Applicant	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear
	1	3,683,080	08-08-1972	Francis	
	2	3,959,458 A	05-25-1976	Oswald, et. al.	
	3	4,216,212	08-05-1980	Flora, et. al.	
	4	4,269,828	05-26-1981	Flora, et. al.	
	5	4,282,214	08-04-1981	Flora, et. al.	
	· 6	4,812,304	03-14-1989	Anderson, et. al.	
	7	4,814,326 A	03-21-1989	Sergio,et. al.	
	8	4,973,576 A	11-27-1990	Shuichi, et. al.	
	9	5,220,021 A	06-15-1993	Colin, et. al.	
	10	5,438,048	08-01-1995	Nikander, et al.	
	11	5,682,656	11-04-1997	Lesley .	
	12	5,882,656	03-16-1999	Bechard, et. al.	
	13	6,221,861	04-24-2001	Seegmiller	

FOREIGN PATENT DOCUMENTS						
Examiner Initials	Cite No.	Foreign Patent Document Country Code-Number-Kind Code Example: JP 1234567 A1	Publication Date MM-DD-YYYY	Name of Patentee or Applicant	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear	T ¹
	14	EP 0 563 096 B1	05-03-2000	Nikander		
	15	EP 0 924 293 A1	06-23-1999	Ceulemans, et. al.		
	16	GB 1 582 694	01-14-1981	Flora		
	17	JP 10017493 A2	01-20-1998	Masatoshi, et. al.		Abstract Only

	NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	litem (heat, maga-ing jaurnal garial aumangium gatalag ata) data naga(a) yaluma jagua			
Christoffersen et al. "Growth and precipitation of a monoclinic calcium pyrophosphate tetrahydrate indicating auto-inhibition at pH7," J. Crystal Growth, 212, 500-506.				
Christoffersen et al. "Kinetics and mechanism of dissolution and growth of acicular triclinic calcium pyrophosphate dihydrate," Crystal Growth and Design, 2002, 2, 567-571.		Christoffersen et al. "Kinetics and mechanism of dissolution and growth of acicular triclinic calcium pyrophosphate dihydrate." Crystal Growth and Design, 2002, 2, 567-571.		
	20	Christoffersen et al. "Kinetics of dissolution of triclinic calcium pyrophosphate dihydrate crystals," J.Crystal Growth, 203 (1999) 234-243.		

Examiner	Signature
----------	-----------

Date Considered

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

T¹ - Place a check mark in this area when an English language Translation is attached.

PTO/SB/08 Equivalent

	Application No.	10/518,808
INFORMATION DISCLOSURE	Filing Date	November 29, 2004
STATEMENT BY APPLICANT	First Named Inventor	Jorg Christoffersen
STATEMENT BY AFFEICANT	Art Unit	1614
(Multiple sheets used when necessary)	Examiner	Unknown
SHEET 2 OF 2	Attorney Docket No.	PLOUG1.001APC

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials Cite No. Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.				
	21	Kenneth P.H. Pritzker. "Crystal-associated Arthropathies: What's New on Old Joints," J. American Geriatrics Society, 28 (1980) 439-445.		
	22	Mandel et al. "Calcium pyrophosphate crystal deposition disease: 15 preparation and characterization of crystals, J. Crystal Growth 87 (1988) 453-462.		
		Muniz et al. "NTP Pyrophosphohydrolase in human chondrocalcinotic and osteoarthritic cartilage." ARTHRITIS AND RHEUMATISM, vol. 27, no. 2, February 1984 (1984-02), pages 186-192, XP002252854, the whole document.		
		Ryan et al. "Calcium pyrophosphate crystal deposition disease, pseudogout and articular chondrocalcinosis," In: Arthritis and Allied Conditions, A Textbook in Rheumatology, 13th edition, Vol II; Ed. W.J. Kooperman, 1997, pp. 2103-2125.		
	25	Ryan et al. "Understanding inorganic pyrophosphate metabolism: toward prevention of calcium pyrophosphate dihydrate crystal deposition, Annals of the Rheumatic Diseases 54 (1995) 939-941.		

1772441\061605

Examiner Signature	Date Considered

^{*}Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.